

NORTH CAROLINA EMPLOYMENT PROJECTIONS TO 20261

Every two years, in conjunction with the Bureau of Labor Statistics (BLS), the North Carolina Department of Commerce publishes 10-year industry and occupation employment projections for statewide and sub-state areas.² The employment projections are an estimate of the future demand for workers based on historical employment data and various economic factors,³ and provide information for policy makers, job seekers, training providers, and businesses to make informed workforce decisions and help ensure that North Carolina's workforce is prepared for tomorrow's job opportunities and economic growth in the state.

The following summary analyzes information on employment growth and projections at the state level and provides key findings by major industry and occupational groups.⁴

Key Highlights of the 2026 Employment Projections:

- North Carolina is projected to add more than 389,000 new jobs between 2017 and 2026.
- The service-providing sector in North Carolina is projected to contribute more than 90% of all net new jobs created.
- Health Care and Social Assistance, NC's largest industry by employment, is projected to be the fastest and highest growing, with 93,000 new jobs (16.1%) added.
- The Professional, Scientific, and Technical Services industry is second in terms of growth rate (15.4%), with more than 36,000 new jobs created by 2026.
- Projections for the Manufacturing industry show a decline of 2.2% losing over 10,000 jobs in the next 9 years.
- Healthcare Support Occupations and Computer and Mathematical Occupations are projected to be the two fastest growing occupational groups.
- Production Occupations are projected to lose 5,000 jobs by 2026 following a declining trend in the Manufacturing industry.
- Job openings due to separations of existing employees will provide significantly more opportunities for job seekers than openings from new growth. For each new job created each year, there will be more than 12 vacancies available due to occupational transfers and exits.

¹ In order to provide employment projections that would reflect the current state of the economy, step-ahead methodology was utilized to adjust the base year given the most recent data available, thus the projections horizon in this report covers a period from 2017 to

² This report analyzes only statewide projections. Sub-state projection results will be available in early 2019.

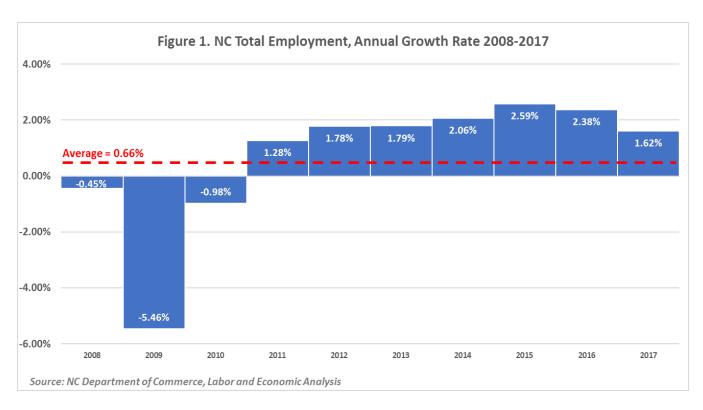
³ Projections assume full employment for the economy in the projected year. Thus, the projections are not intended to be an economic forecast of future employment.

⁴ Detailed employment projections for more than 100 individual industries and 700 detailed occupations can be found at: https://www.nccommerce.com/lead/data-tools/industry/projections and https://www.nccommerce.com/lead/datatools/occupations/projections

- Despite the overall decline, Production Occupations will be ranked fifth in terms of job openings available each year (39,000) due to occupational separations.
- Food Preparation and Serving Related Occupations, Office and Administrative Support Occupations, and Sales and Related Occupations will have the largest number of annual job openings more than 70,000 each.
- The share of occupations requiring no formal educational or high school diploma is projected to shrink from 62.7% to 62.0% statewide over the next 9 years; however, they are projected to produce the most job openings, mostly due to high separation rates.
- Jobs in occupations that paid over \$75,000 are projected to grow faster than those that paid under \$30,000. However, the increased number of net new jobs from today's low-paying occupations are projected to outnumber the increase in high-paying ones by a ratio of nearly 2.4 to 1, since there are far more jobs at the bottom end of the pay scale.

1. Total Employment

North Carolina employment is projected to add more than 389,000 new jobs between 2017 and 2026, growing annually at an average rate of 0.89%. Looking at historical trends in Figure 1, many of the individual years from 2008-2017 show growth above the projected 0.89% annual growth through 2026, though the projected growth rate of 0.89% shows stronger growth than the average annual growth (0.66%) during the past decade. The projected annual growth rate estimate of 0.89% for North Carolina is also higher than projected national average (0.7%)⁵ over a comparable (2016-2026) period.



⁵ BLS Employment Projections for 2016-26: https://www.bls.gov/news.release/ecopro.nr0.htm

2. Industry employment

2.1 Service-Providing

Similar to the national trends, service-providing industries in North Carolina are projected to add more jobs than goods-producing industries. This sector provided nearly 80% of the state's total employment in 2017, and is expected to generate approximately 355,000 new jobs by 2026 (Table 1).

Table 1. North Carolina Industry Employment Projections, 2017-2026

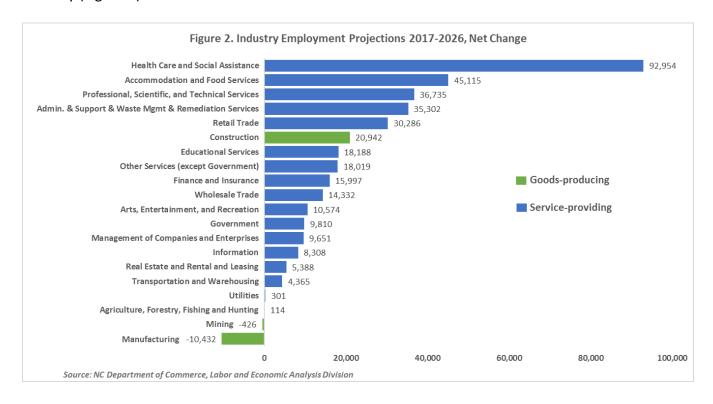
Industry Sector	Employment Estimate 2017	Employment Estimate 2026	Net Change	Percent Change	Annualized Growth Rate	Average Weekly Wage	
Total All Industries	4,684,945	5,073,989	389,044	8.3%	0.89%	\$940.59	
Goods Producing	701,696	711,894	10,198	1.5%	0.16%		
Agriculture, Forestry, Fishing and Hunting	22,241	22,355	114	0.5%	0.06%	\$672.58	
Construction	208,745	229,687	20,942	10.0%	1.07%	\$1,007.36	
Manufacturing	467,823	457,391	-10,432	-2.2%	-0.25%	\$1,122.53	
Mining	2,887	2,461	-426	-14.8%	-1.76%	\$1,221.49	
Services Providing	3,693,264	4,048,589	355,325	9.6%	1.03%		
Accommodation and Food Services	423,126	468,241	45,115	10.7%	1.13%	\$330.83	
Administrative and Support and Waste Management and Remediation	293,948	329,250	35,302	12.0%	1.27%	\$694.77	
Arts, Entertainment, and Recreation	74,189	84,763	10,574	14.3%	1.49%	\$595.52	
Educational Services	379,703	397,891	18,188	4.8%	0.52%	\$865.69	
Finance and Insurance	168,289	184,286	15,997	9.5%	1.01%	\$1,824.33	
Government*	295,576	305,386	9,810	3.3%	0.36%		
Health Care and Social Assistance	577,914	670,868	92,954	16.1%	1.67%	\$949.20	
Information	78,877	87,185	8,308	10.5%	1.12%	\$1,534.47	
Management of Companies and Enterprises	82,821	92,472	9,651	11.7%	1.23%	\$2,077.58	
Professional, Scientific, and Technical Services	239,236	275,971	36,735	15.4%	1.60%	\$1,531.76	
Real Estate and Rental and Leasing	58,523	63,911	5,388	9.2%	0.98%	\$936.17	
Retail Trade	498,818	529,104	30,286	6.1%	0.66%	\$533.81	
Transportation and Warehousing	149,282	153,647	4,365	2.9%	0.32%	\$931.40	
Utilities	13,918	14,219	301	2.2%	0.24%	\$1,722.85	
Wholesale Trade	185,186	199,518	14,332	7.7%	0.83%	\$1,388.95	
Other Services (except Government)	173,858	191,877	18,019	10.4%	1.10%	\$655.20	
Self Employed and Unpaid Family Workers	289,985	313,506	23,521	8.1%	0.87%		
* Average weekly wage is not reported due to employment adjustment made in the Government industry group.							

Source: NC Department of Commerce, Labor and Economic Analysis Division

Health Care and Social Assistance is the largest service industry and it is also projected to be the fastest growing, contributing almost 93,000 new jobs by 2026 (Figure 2). Its projected annualized growth rate of 1.67% (Table 1) is twice as high as the remainder of NC industries. In terms of detailed sectors, most of this growth will be within Ambulatory Health Care Services, Hospitals, and Social Assistance. This reflects increased demand for health care services by North Carolina's aging population. The Professional, Scientific, and Technical Services industry is expected to be the second fastest-growing, with an annualized growth rate of 1.60%, and third in terms of net change, with nearly 37,000 new jobs created over 9 years. These two industries have been historically strong, and their importance to the state economy is amplified by the fact that while employing nearly one fifth of the total state labor force, they tend to pay relatively high wages.

⁶ Based on the North Carolina Office of State Budget and Management projections(<u>https://www.osbm.nc.gov/demog/county-projections</u>), the share of population aged 55 and above is expected to increase from 28% to 32% between 2017 and 2026.

The Accommodation and Food Services sector will also be an important contributor to the state's labor market with more than 45,000 jobs added by 2026, largely in the Food Services and Drinking Places industry (Figure 2).



Professional, Scientific, and Technical Services (1.60% annually); Arts, Entertainment, and Recreation (1.49%); and Administrative and Support and Waste Management and Remediation (1.27%) are also in the top fastest growing industries.

2.2 Goods-Producing

Compared to the Service-providing sector, the goods-producing sector is expected to grow at a much slower pace. The net increase is driven entirely by the Construction industry, which is projected to gain 10% in employment and generate nearly 21,000 new jobs over the projection period. Nonetheless, the 229,687 jobs in Construction projected for 2026 is still below the pre-recessional level of 255,000 in 2007.

Manufacturing employment is projected to see a modest decline in North Carolina, but not as sharp as in the U.S. overall. Roughly 0.25% of manufacturing jobs in NC are expected to be lost each year by 2026 compared to an annual 0.6% decline in the nation. The largest projected employment loss in the state's manufacturing industries will be seen in Textile Mills (-6,421 jobs), Apparel Manufacturing (-2,078 jobs), and Computer and Electronic Product Manufacturing (-1,844 jobs). However, job losses in these industries will be partially offset by growing employment in Chemical Manufacturing (+1,804 jobs), Food Manufacturing (+1,712), and Plastics and Rubber Products Manufacturing (+1,638).

The job count for Agriculture, Forestry, Fishing and Hunting is projected to increase very modestly, with some job redistribution expected from Animal Production and Forestry and Logging to Crop Production and Support Activities for Agriculture and Forestry.

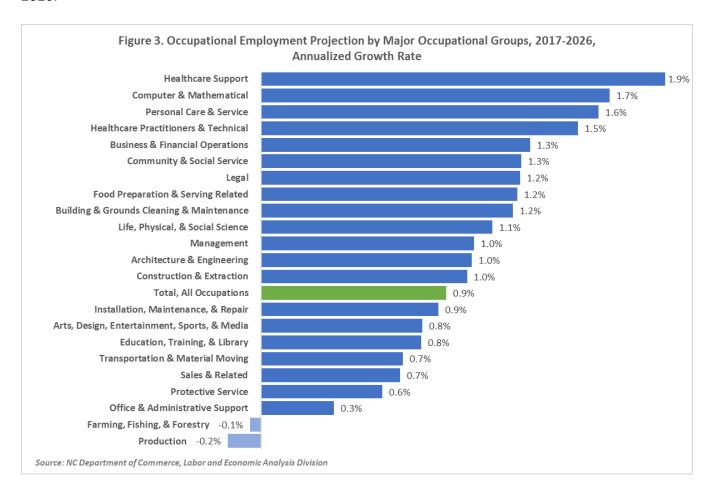
3. Occupational employment

3.1 Growth

Table 2 shows occupational employment estimates for 2017-2026. The five largest occupational groups together are expected to account for almost half of the total employment in 2026: Office and Administrative Support Occupations; Sales and Related Occupations; Food Preparation and Serving Related Occupations; Transportation and Material Moving Occupations; and Production Occupations. All but one are expected to grow by 2026 with Food Preparation and Serving Related Occupations expanding the most at 11.7%. However, employment in Production Occupations, mostly found in the declining Manufacturing industry, is projected to modestly decline (-5,009) by 2026.

Jobs related to Healthcare and Personal Care are expected to see particular growth. Healthcare Support Occupations (healthcare aides, assistants, etc.), Personal Care and Service Occupations (attendants, care workers, hairdressers, etc.), and Healthcare Practitioners and Technical Occupations (doctors, nurses, technicians, etc.), along with Computer and Mathematical Occupations, are all among the top fastest expanding groups (Figure 3).

Production Occupations and Farming, Fishing, and Forestry Occupations are the only two occupational groups projected to have a negative growth rate, eliminating about 5,000 and 90 jobs, respectively, by 2026.



The fastest growth rates are projected for occupations at both the lowest and highest ends of the wage scale (Table 2). Occupational groups with median annual wages below \$30,000 employed about 1.76

million workers in 2017; this number is projected to reach 1.93 million by 2026, a 9.9% increase. For the high-paying occupations, with median annual wages above \$75,000, employment will grow 11.5% over the same period, from approximately 387,000 to approximately 433,000. While there's a stark difference in wages, many of the occupations in these high-growth groups have one thing in common – the dominance of non-routine tasks⁷ (which are difficult to automate) in their daily work. Jobs with a high degree of regular, routine work, such as Production, Agriculture, and Office/Administrative occupations, are projected to face slow growth or declines.

Table 2. North Carolina Employment Projections by Major Occupational Group, 2017-2026

Occupational Group	Employment Estimate 2017	Employment Estimate 2026	Net Change	Percent Change	Annualized Growth Rate	2017 Annual Median Wage
Management Occupations	252,277	276,517	24,240	9.6%	1.0%	\$106,590
Computer and Mathematical Occupations	134,911	156,675	21,764	16.1%	1.7%	\$84,120
Architecture and Engineering Occupations	67,848	74,288	6,440	9.5%	1.0%	\$73,080
Business and Financial Operations Occ.	229,478	257,620	28,142	12.3%	1.3%	\$65,530
Legal Occupations	25,548	28,560	3,012	11.8%	1.2%	\$60,890
Life, Physical, and Social Science Occupations	37,575	41,509	3,934	10.5%	1.1%	\$59,590
Healthcare Practitioners and Technical Occ.	276,863	317,231	40,368	14.6%	1.5%	\$59,080
Community and Social Service Occupations	78,588	87,891	9,303	11.8%	1.3%	\$43,520
Arts, Design, Entertainment, Sports, and Media Occ.	61,957	66,412	4,455	7.2%	0.8%	\$43,480
Education, Training, and Library Occupations	272,292	291,733	19,441	7.1%	0.8%	\$43,320
Installation, Maintenance, and Repair Occ.	196,921	212,549	15,628	7.9%	0.9%	\$42,220
Construction and Extraction Occupations	189,297	206,848	17,551	9.3%	1.0%	\$37,060
Protective Service Occupations	102,277	107,767	5,490	5.4%	0.6%	\$35,670
Total, All Occupations	4,684,945	5,073,989	389,044	8.3%	0.9%	\$34,750
Office and Administrative Support Occ.	654,165	675,014	20,849	3.2%	0.3%	\$33,100
Production Occupations	346,532	341,523	-5,009	-1.4%	-0.2%	\$30,960
Transportation and Material Moving Occ.	335,926	357,094	21,168	6.3%	0.7%	\$28,650
Farming, Fishing, and Forestry Occupations	18,369	18,278	-91	-0.5%	-0.1%	\$27,330
Healthcare Support Occupations	154,974	184,303	29,329	18.9%	1.9%	\$25,420
Sales and Related Occupations	512,135	543,788	31,653	6.2%	0.7%	\$25,340
Building & Grounds Cleaning and Maint. Occ.	162,627	181,226	18,599	11.4%	1.2%	\$23,400
Personal Care and Service Occupations	148,293	171,414	23,121	15.6%	1.6%	\$21,400
Food Preparation and Serving Related Occ.	426,092	475,749	49,657	11.7%	1.2%	\$19,260

Source: NC Department of Commerce, Labor and Economic Analysis Division

3.2 Openings

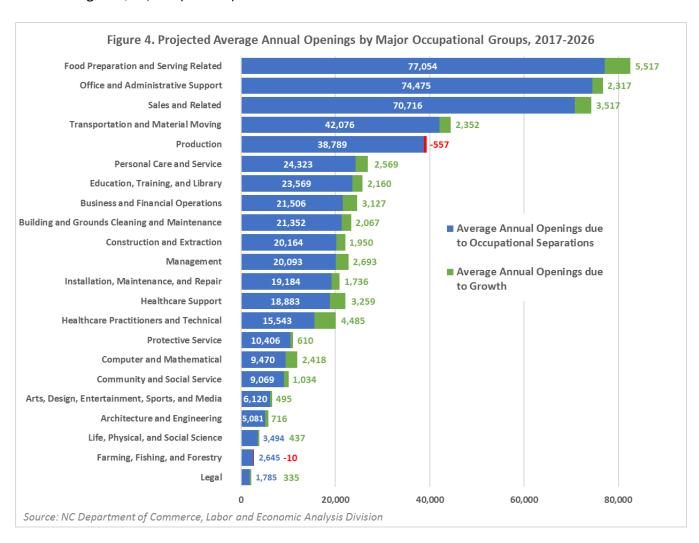
Net employment change discussed in the previous section is an important indicator of the growth in occupations, which reflects the number of new jobs created as a result of economic or demographic changes. However, multiple job openings might also be available for entrants due to labor market turnover. Occupational employment projections estimate such job openings when workers either exit the labor force or leave an occupation to enter a different occupation and need to be replaced. For most occupations, these occupational separations provide significantly more job openings than

⁷ https://www.nccommerce.com/lead/research-publications/the-lead-feed/artmid/11056/articleid/268/where-the-jobs-are-supply-and-demand-for-labor-in-north-carolina%E2%80%99s-regions

employment growth does (Figure 4). 8 On average, at the state level, the number of new jobs created from separations is 12.4 times higher than those from growth.

Job seekers, policy makers, and workforce education and training establishments may want to consider analyzing total openings, in addition to growth, when making important decisions. For example, while the overall number of workers employed in various Production Occupations jobs is expected to decline over the next decade (Table 2), it will still be in the top five occupational groups supplying jobs each year (Figure 4).

The largest number of total annual openings will occur for occupations with traditionally high turnover rates or those that do not require extensive skills or training: Food Preparation and Serving Related Occupations; Transportation and Material Moving Occupations; Sales and Related Occupations; and Office and Administrative Support Occupations. All of these are also located on the lower end of the pay scale, with annual median wages ranging from \$19,260 for Food Preparation and Serving Related Occupations to \$33,100 for Office and Administrative Support Occupations, all below the total state median wage of \$34,750 (Table 2).



⁸ Starting with the 2016-2026 projections, BLS employed a new method to estimate the number of occupational separations, replacing previous methodology: https://www.nccommerce.com/lead/data-tools/occupations/projections

3.3 Educational Attainment

In 2017, occupations requiring no formal education or only a high school diploma⁹ accounted for 62.7% of total employment; however, this is projected to decline to 62% by 2026. In contrast, the share of occupations requiring education beyond high school will expand moderately at each educational level. (Table 3). Through 2026, occupations that require a Master's, Doctoral, or professional degree are projected to have the fastest annual growth of 1.3% - slightly higher than those requiring a Bachelor's degree (1.22%). Over 200,000 positions per year are projected to be available to those with a Bachelor's degree.

Still, occupations that require a High School diploma or equivalent, or no formal education, will see more total annual job openings than all other occupations combined – more than 407,000 each year, largely due to high transfer and exit rates.

Table 3. Projected Employment by BLS Educational Requirement

Minimum Education Requirement	Empl. Estimate 2017	Empl. 2017, % of Total	Empl. Estimate 2026	Empl. 2026, % of Total	Percent Change	Annual Growth	Average Annual Openings
High school diploma (or equivalent) or No formal educational credential	2,937,401	62.7%	3,146,085	62.0%	7.1%	0.77%	407,564
Associate's degree, Postsecondary non- degree award or Some college	517,320	11.0%	566,357	11.2%	9.5%	1.01%	41,823
Bachelor's degree	941,435	20.1%	1,050,053	20.7%	11.5%	1.22%	205,578
Master's, Doctoral or professional degree	184,291	3.9%	207,099	4.1%	12.4%	1.30%	44,733

Source: NC Department of Commerce, Labor and Economic Analysis Division

⁹ Based on the BLS entry-level education requirement scale: https://www.bls.gov/emp/documentation/education/tech.htm